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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/537,773 | 03/29/2000 | Yoshifumi Shibata | 15162/01740 | 7266 |

24367 7590 02/26/2002

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EXAMINER

PATEL, NITIN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2673

DATE MAILED: 02/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/537,773

Applicant(s)

SHIBATA ET AL.

Examiner

Nitin Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1,2,4-8,10-12,14 is rejected under 35 U.S.C. 102(e) as being anticipated by Kanno et al., (U.S. Patent No. 5,726,679).

As per claim 1, Kanno shows an information display apparatus (In Fig.1 element 11) comprising:

A liquid crystal display having a plurality of liquid crystal pixels defined by a plurality of scan electrodes and a plurality of data electrodes (In fig.1 element 12C and 13D and In Col.4 lines 54-56);

a driver, which is connected to scan electrodes and data electrodes to drive liquid crystal display (In Fig.1 element 12 and In Col.4 lines 59-60);

a controller (In Fig.1 element 15 and In Col. 5 lines 10-27) which is connected to driver, a controller being capable of controlling driver to select only part of scan electrodes to perform writing on only part of the pixels of the liquid crystal display corresponding to the selected scan electrodes (In Col.6 lines 30-60).

As per claim 2, Kanno shows an information display apparatus, wherein liquid crystal display having a liquid crystal material, which is capable of keeping one of a plurality of stable states under no field condition (In Col.12 lines 37-54).

As per claim 4, Kanno shows a controller controls drivers based on motion picture data (In col.12 lines 46-55).

As per claim 5 Kanno shows a controller sends data regarding writing start line and a writing end line to driver (In Col.11 lines 58-67 to Col.12 lines 1-27).

As per claims 6,7 Kanno shows an information display apparatus (In fig.12) comprising a display having a first display area and a second display area, which are different from each other in time required for writing (In Col.12 lines 9-55).

As per claim 8, Kanno teaches a first display area is capable of displaying an image with a first contrast and a second display area is capable of displaying an image with a second contrast (In col. 13 lines 35-67 to Col.14 lines 1-35).

As per claims 10 Kanno teaches a first display area and a second display area images with mutually different dot sizes respectively (In col.12 lines 57-67 to Col.13 lines 1-14).

As per claim 11, Kanno shows an information display apparatus having a first display which displays an image using a first displaying method (In col.12 lines

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37-45) and a second display which displays an image by using a second displaying method and second display being reflective type liquid crystal display and being capable of keeping the image without consuming electric power (In col.7 lines 18-32 and In Col.12 lines 12 lines 28-67 to Col.13 lines 1-35).

As per claims 12,14 Kanno shows a display area of second display is larger than first display (In Fig.12 and In Col.12 lines 37-45) and first display and second display overlap each other (In fig.12).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3,9,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanno et al., (U.S. Patent No. 5,726,679) in view of Terada et al., (U.S. patent No. 5,657,141).

As per claims 3,13 Kanno teaches a liquid crystal display like ferroelectric display scanning period at room temperature (In Col.6 line 1-3). Kanno does not specifically teach a cholesteric phase at a room temperature.

Terada teaches cholesteric phase at a room temperature (In col.18 lines 35-42).

It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to aloe the teaching of Cholesteric of Terada's into the

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system of Kanno because it would have provided liquid crystal display having a good shock resistance at a low temperature.

As per claim 9, Kanno teaches LCD display wherein a second display having a two-tone display (black and white state form In Col.7 lines 40-67). Kanno does not teach shows a first display capable of displaying an image three or more tone .It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to have multiple colors or tones as taught by Kanno using ferroelectric liquid crystal display is well known in the art.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanno et al., (U.S. Patent No. 5,726,679) in view of Shibata et al., (U.S. patent No. 6,285,391)

As per claim 15 Kanno teaches a liquid crystal display device (In Fig.1).

Kanno does not specifically teach a first display is detachable from information display apparatus. Shibata teaches a detachable display from the information display (In fig.14 and In col.14 lines 22-34). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to allow the teaching of Shibata's into the system of Kanno because it would have portability of a multi display system.

CONCLUSION

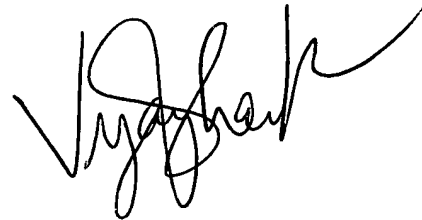
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 703-308-7024. The examiner can normally be reached on 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H Shalwala can be reached on 703-305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-9052 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9618.

NP
February 21, 2002

A handwritten signature in black ink, appearing to read 'Vijay Shankar', with a stylized, flowing script.

**VIJAY SHANKAR
PRIMARY EXAMINER**